A

Student Name _____

School Name _____

District Name/LEA _____

PARCC

Grade 4
Mathematics
Performance Based Assessment
Practice Test

B

Last Name	First Name	MI

(Letter grid bubbles A–Z for Last Name, First Name, and MI)

C

Place the
Student ID Label Here

D Gender

◯ Female   ◯ Male

E Date of Birth

Day	Month	Year

Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

School Use Only

F State Student Identifier

(Letter and number grid bubbles A–Z, 0–9)

Unit 1

Directions:

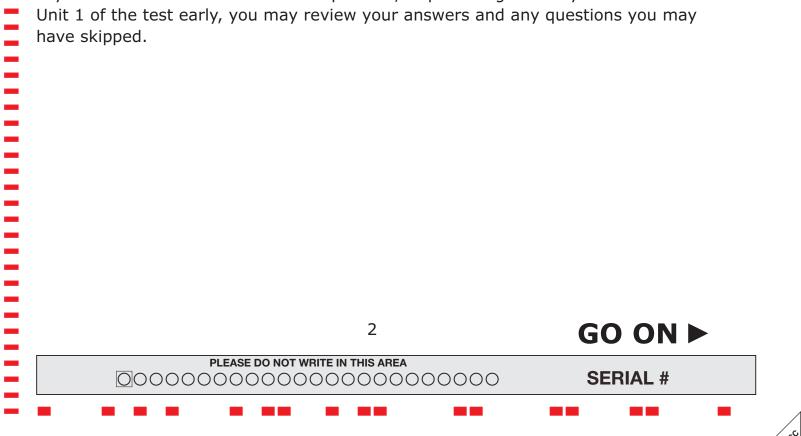Today, you will be taking Unit 1 of the Grade 4 Mathematics Practice Test.

Read each question carefully. Some questions will ask you to choose one correct answer, while others will ask you to choose more than one correct answer. Mark your answers by filling in the circles in your Test Booklet for the answers you choose.

If a question asks you to show or explain your work, you must do so to receive full credit. Be sure to:

- Write your response in the box provided in your Test Booklet.

- Label each part of your work if a question has multiple parts, and clearly identify your answer for each part.

- Respond in the box provided. Crossed-out work, writing that falls outside of the box, or work on scratch paper will <u>not</u> be scored.

Do not make any stray marks on the Test Booklet. If you need to change an answer, be sure to erase your first answer completely.
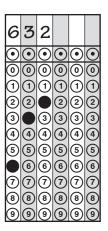
If you do not know the answer to a question, skip it and go on. If you finish Unit 1 of the test early, you may review your answers and any questions you may have skipped.

GO ON ▶

Directions for Completing the Answer Grids

1. Work the problem and find an answer.

2. Write your answer in the boxes at the top of the grid.

   - Print your answer starting with the first digit in the left box.

   - Print only one digit or symbol in each box. You may not need all the boxes to enter an answer, but do <u>not</u> leave a blank box in the middle of an answer.

3. Under each box in which you wrote your answer, fill in the bubble that matches the number or symbol you wrote above.

   - Fill in one and ONLY one bubble for each box. Do <u>not</u> fill in a bubble under an unused box.

   - Fill in each bubble by making a solid mark that completely fills the circle.

   - Fractions cannot be entered into an answer grid and will not be scored. Enter fractions as decimals.

4. See below for examples on how to correctly complete an answer grid.

To answer 632 in a question, fill in the answer grid as follows:

To answer .75 in a question, fill in the answer grid as follows:

GO ON ▶

1. The value of the digit 4 in the number 42,780 is 10 times the value of the digit 4 in which number?

   Ⓐ   34,651

   Ⓑ   146,703

   Ⓒ   426,135

   Ⓓ   510,400

2. Mike is 3 years old. Joe is 6 times as old as Mike.

Which equation shows how to find Joe's age?

   Ⓐ $6 \div 3 = 2$

   Ⓑ $9 - 3 = 6$

   Ⓒ $3 \times 6 = 18$

   Ⓓ $3 + 6 = 9$

GO ON ▶

SERIAL #

Use the information provided to answer Part A and Part B for question 3.

The number of science fair projects entered for each grade in a city-wide science fair is shown.

City-Wide Science Fair

Grade	Number of Science Fair Projects
3	462
4	759
5	891

GO ON ▶

3. **Part A**

   The science fair projects are set up on tables. There are 99 long tables used. Each long table holds 7 projects. The rest of the projects are set up on short tables. Each short table can hold 4 projects. What is the **fewest** number of short tables that will be needed for the rest of the projects?

   Ⓐ 202

   Ⓑ 203

   Ⓒ 354

   Ⓓ 355

   Part B

   The science fair judges will be science teachers and volunteers. Each judge will only have time to view 5 science fair projects. There are 133 science teachers. What is the **fewest** number of volunteers needed to have enough judges for all of the projects?

   Ⓐ 290

   Ⓑ 396

   Ⓒ 422

   Ⓓ 423

6

GO ON ▶

SERIAL #

4. Which pair of fractions is equivalent?

Ⓐ $\frac{1}{3}$ and $\frac{3}{5}$

Ⓑ $\frac{2}{4}$ and $\frac{3}{5}$

Ⓒ $\frac{6}{10}$ and $\frac{4}{8}$

Ⓓ $\frac{6}{10}$ and $\frac{3}{5}$

5. The point on the number line shows the value of the sum of two fractions.

Which expression has the same sum?

Ⓐ $\frac{4}{3} + \frac{4}{3}$

Ⓑ $\frac{6}{4} + \frac{2}{4}$

Ⓒ $\frac{5}{6} + \frac{3}{6}$

Ⓓ $\frac{2}{12} + \frac{6}{12}$

GO ON ▶

6. Which pairs of fractions show a correct comparison?

Select the **two** correct answers.

Ⓐ $\quad \dfrac{2}{5} = \dfrac{40}{100}$

Ⓑ $\quad \dfrac{2}{5} > \dfrac{6}{9}$

Ⓒ $\quad \dfrac{2}{5} > \dfrac{2}{3}$

Ⓓ $\quad \dfrac{3}{5} < \dfrac{8}{12}$

Ⓔ $\quad \dfrac{3}{5} > \dfrac{2}{3}$

Ⓕ $\quad \dfrac{3}{5} = \dfrac{98}{100}$

GO ON ▶

SERIAL #

Use the information provided to answer Part A and Part B for question 7.

Jake and each of his two brothers choose a fraction between 0 and 1. Jake chooses $\frac{3}{4}$, Aaron chooses $\frac{9}{10}$, and Simon chooses $\frac{4}{12}$.

7. **Part A**

Which comparison is correct?

Ⓐ $\frac{9}{10} < \frac{4}{12}$

Ⓑ $\frac{4}{12} = \frac{3}{4}$

Ⓒ $\frac{3}{4} < \frac{9}{10}$

Ⓓ $\frac{4}{12} > \frac{3}{4}$

Part B

Select a group of fractions that includes an equivalent fraction for each of the fractions $\frac{3}{4}$, $\frac{9}{10}$, and $\frac{4}{12}$.

Ⓐ $\frac{3}{8}, \frac{9}{100}, \frac{1}{4}$

Ⓑ $\frac{3}{8}, \frac{90}{100}, \frac{1}{3}$

Ⓒ $\frac{9}{12}, \frac{90}{100}, \frac{1}{3}$

Ⓓ $\frac{9}{12}, \frac{90}{100}, \frac{1}{4}$

9

GO ON ▶

Use the information provided to answer Part A and Part B for question 8.

Jian's family sells honey from beehives. They collected 3,311 ounces of honey from the beehives this season. They will use the honey to completely fill 4-ounce jars or 6-ounce jars.

Jian's family will sell 4-ounce jars for $5 each or 6-ounce jars for $8 each.

Jian says if they use only 4-ounce jars, they could make $4,140 because 3,311 ÷ 4 = 827 R 3. That rounds up to 828, and 828 multiplied by $5 is $4,140.

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8. **Part A**

Explain the error that Jian made when finding the amount of money his family could make if they use only 4-ounce jars.

Enter your explanation in the space provided.

10

GO ON ▶

Part B

Explain how to determine the money Jian's family could make if they use only 6-ounce jars. Include the total amount of money and the total number of 6-ounce jars in your explanation.

Enter your answers and your explanation in the space provided.

GO ON ▶

Use the information provided to answer Part A and Part B for question 9.

Camille wants to make fruit drinks. The directions to make one drink include mixing $\frac{4}{8}$ cup of yogurt and 1 cup of ice with the amounts of each fruit shown.

- $\frac{5}{8}$ cup of banana slices

- $\frac{2}{8}$ cup of blueberries

GO ON ▶

SERIAL #

9. **Part A**

Camille wants to make 6 drinks for her friends. How many total cups of blueberries and banana slices will she use to make the 6 drinks?

Ⓐ $\dfrac{7}{8}$

Ⓑ $\dfrac{12}{8}$

Ⓒ $\dfrac{30}{8}$

Ⓓ $\dfrac{42}{8}$

Part B

Next Camille will add the yogurt and ice. How many total cups of yogurt and ice will she use to make the 6 drinks? Show your work or explain your answer.

Enter your answer and work or explanation in the space provided.

GO ON ▶

10. Part A

Alex ran 0.5 mile.

What number should replace the ? to make a fraction equivalent to 0.5?

$$\frac{?}{10}$$

Enter your answer in the box.

GO ON ▶

SERIAL #

Part B

Christy ran $\frac{4}{10}$ mile on Monday and $\frac{7}{100}$ mile on Tuesday. She said that she ran a total of $\frac{47}{100}$ mile. Christy told Alex that she ran a greater distance than he ran, because 47 is more than 5.

- Identify the incorrect reasoning in Christy's statement.
- Explain how Christy can correct her reasoning.
- Use >, <, or = to give a correct comparison between the distances that Alex and Christy ran.

Enter the incorrect reasoning, your explanation, and the correct comparison in the space provided.

15

11. A basketball team scored a total of 747 points for the season. This was 9 times the number of points scored in the first game. How many points were scored during the first game?

Ⓐ 73

Ⓑ 75

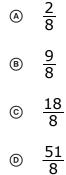Ⓒ 82

Ⓓ 83

12. Which numbers make the comparison true?

$$27{,}768 < \boxed{}$$

Select the **two** correct answers.

Ⓐ 27,759

Ⓑ 28,744

Ⓒ 26,773

Ⓓ 27,568

Ⓔ 27,836

13. What is the value of $6 \times \dfrac{3}{8}$?

Ⓐ $\dfrac{2}{8}$

Ⓑ $\dfrac{9}{8}$

Ⓒ $\dfrac{18}{8}$

Ⓓ $\dfrac{51}{8}$

GO ON ▶

Use the information provided to answer Part A and Part B for question 14.

Martin cut a pan of corn bread into equal pieces as shown in the model.

---

14. Part A

Martin gave $\frac{1}{3}$ of the corn bread to his neighbor.

Explain how you can use the model to show $\frac{1}{3}$. Then write a fraction that is equivalent to $\frac{1}{3}$.

Enter your explanation and your answer in the space provided.

17

GO ON ▶

Part B

Martin gave $\frac{6}{12}$ of the corn bread to his teacher.

Write a comparison using <, >, or = to compare the fractions $\frac{1}{3}$ and $\frac{6}{12}$.

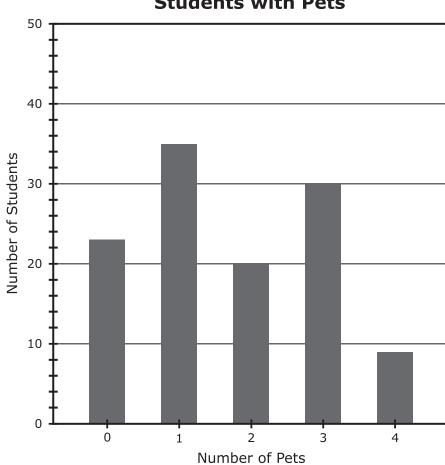Explain how the model can be used to compare these fractions.

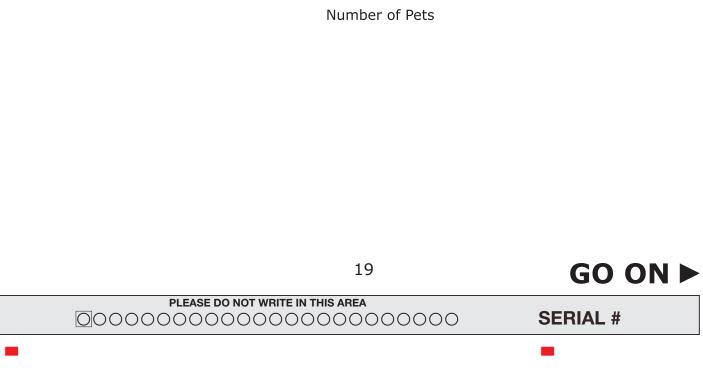Enter your comparison and your explanation in the space provided.

GO ON ▶

Use the information provided to answer Part A through Part C for question 15.

Ms. Sloan asked 117 fourth-grade students the question, "How many pets do you have?" She displayed the data she collected in the bar graph shown.

Students with Pets

GO ON ▶

15. Part A

How many of the students that responded have 2 pets?

Enter your answer in the box.

Part B

How many more students have 1 pet than students who have 3 pets? Explain your answer.

Enter your answer and explanation in the space provided.

GO ON ▶

SERIAL #

Part C

Find the total number of pets the fourth-grade students have.

- Explain how you used the bar graph to solve the problem.
- Show your work using equations.

Enter your explanation, your work, and the total number of pets in the space provided.

GO ON ▶

16. Part A

Shaun plotted a point on the number line by drawing 5 equally spaced marks between 0 and 1 and placing a point on the third mark. He claims that the point represents the fraction $\frac{3}{5}$ because each mark represents $\frac{1}{5}$, so the third mark represents $\frac{3}{5}$.

- Explain why Shaun's reasoning is incorrect.
- Explain how you can use the number line to determine the fraction that Shaun's point represents.
- Determine the fraction that Shaun's point represents.

Enter your explanations and your answer in the space provided.

GO ON ▶

SERIAL #

Part B

Shaun wants to write a fraction that is equivalent to the fraction $\frac{2}{3}$.

Describe how Shaun can find a fraction that is equivalent to $\frac{2}{3}$.

Enter your description in the space provided.

GO ON ▶

17. The table shows the number of yards Ed ran in each of the first three football games of the season.

Ed's Running Yards

Game	Yards
1	157
2	309
3	172

After the first three games of the season, Rico had exactly 3 times the total number of running yards that Ed had.

How many **more** total running yards did Rico have than Ed after the first three games of the season? Show your work or explain how you got your answer.

Enter your answer and your work or explanation in the space provided.

STOP

STOP

You have come to the end of the test.

- **Review your answers.**
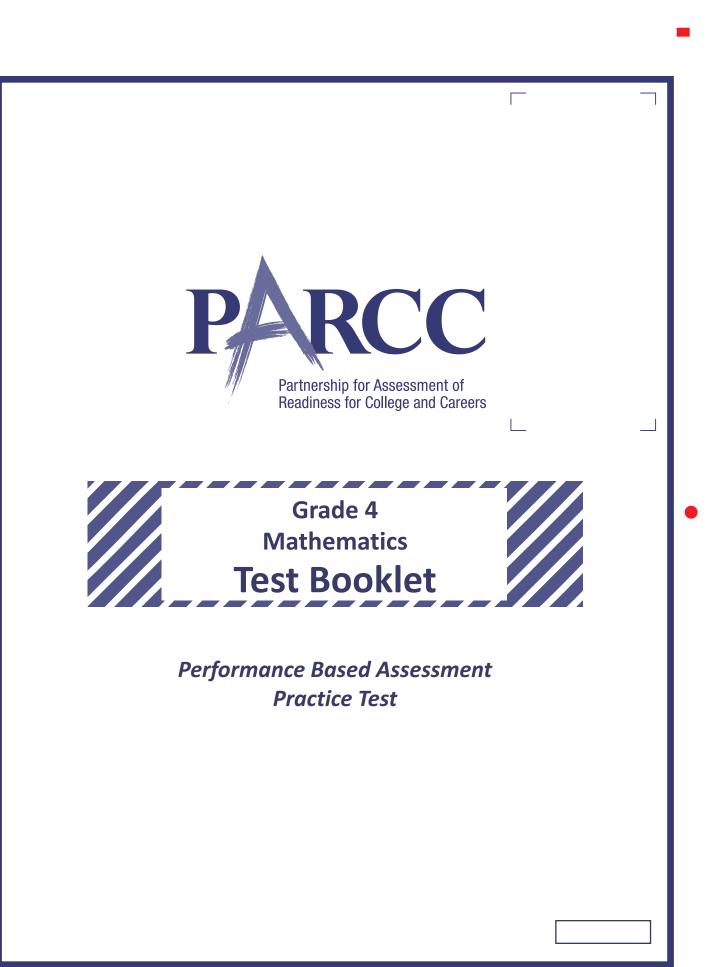- **Then, close your test booklet and raise your hand to turn in your test materials.**

STOP

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SERIAL #

PARCC

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Grade 4
Mathematics
Test Booklet

*Performance Based Assessment
Practice Test*